OCPP EV Charger Network Configuration Guideline

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ZHEJIANG BENYI NEW ENERGY CO., LTD.

WENZHOU BRIDGE INDUSTRIAL ZONE, BEIBAIXIANG TOWN, ZHEJIANG, CHINA TEL: +86-577-5717 7008 FAX: +86-577-5717 7007 VERSION: 20230408 ⊠ benyi@zjbeny.com © www.beny.com

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01

G R E E N S M A R T

> 1.1. Connection Configuration

> 1.1.1. Enter the Configuration Mode

For the new EV charger: After started, the EV charger is in the off-line mode. For renewing configuration charger: 1.Press the small test button and the emergency stop button on the charger meanwhile.

2. Power ON the charger.

3.Release the buttons after a beep sound.

Note: After the EV charger is powered on, if the EV charger should be initialized, please power off and on it again for configuration.(Please power on again after 30 seconds for configuration.)



> 1.1.2. Connect to the Wi-Fi Routing Signal

Connect to this Wi-Fi through your computer or mobile phone (The Wi-Fi name is "EVSEXXXXXXXXXXXXX, and the default password is "12345678").

(You can reset the password as the default one: Power ON the charger; Find the the reset button on the PCB inside of the EV charger ; Press it and hold for 5s.)



1. WEB configuration

> 1.1.3. Access the Charger through a Browser

Access 192.168.1.1 using a browser, just like configuring a router. Recommend Google Chrome for better compatibility.

OCPP Charge Point Configu × +
 Q 192.168.1.1

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> 1.2. Enter the Configuration Page

Go to the configuration page, you can see some configurations.



Configuration Item	Details of Configuration Item
Open The Network Configuration Interface	NetWork setting, Wi-Fi Config, LTE Config
Open The Central System Configuration Interface	Security, Server, HTTP Basic Authentication, Custom Vendor Info
Open The DLB Configuration Interface	General, Normal DLB, Solar DLB, DLB on cloud
Open The RFID Configuration Interface	General, RFID Unique Config, Reader mode Config
Open The Other Configuration Interface	Parameter configuration, Ground Fault Detection, External Meter Enable, Dry Contact Enable, Authorization Cache
Open The Password Configuration Interface	Change Password
Exit Web Configuration mode	Exit Web Configuration mode

> 1.3. OCPP Network Configuration

> 1.3.1. Network setting

Wi-Fi WPS
Wi-Fi Custom
4G
Ethernet
Offline(Plug and Play)

Offline(RFID)

Configuration Item	Explanation of Configuration Items	Related configuration items
Wi-Fi WPS	Wi-Fi WPS means that the terminal can connect to Wi-Fi via wps. WPS, a wireless encryption authentication method, is used to simplify the security setup and network management of Wi-Fi wireless. Instead of entering the wireless network password, the terminal can connect wirelessly to the router by pressing the WPS button directly.	
Wi-Fi Custom	Connect to Wi-Fi by entering the wireless network name and password.	Wi-Fi SSID Wi-Fi Password
4G	4G is optional. Please note if the EV charger supports 4G networking. If 4G connectivity is needed, please insert the SIM card into the EV charger, and ensure that the SIM card is not encrypted by PIN code.	LTE APN LTE APN User LTE APN Password
Ethernet	Connect the network cable into the Ethernet RJ45 port of the EV charger for networking	
Offline(Plug and paly)	With this option enabled, the OCPP EV charger will be disconnected from the OCPP platform. It can be used as an unsmart EV charger with the plug-and-charge mode.	
Offline(RFID)	With this option enabled, the OCPP EV charger will be disconnected from the OCPP platform. It can be used as an unsmart EV charger with the RFID card swiped charging mode.	RFID Unique RFID Unique ID

1. WEB configuration

> 1.3.2. WIFI Config

Wi-Fi SSID	
Wi-Fi Password	
	_

Configuration Item	Explanation of Configuration Items	Maximum Length
Wi-Fi SSID	This configuration requires entering the name of the Wi- Fi. The Wi-Fi will be connected to the EV charger when "Wi-Fi Custom" is selected in the networking mode.	30
Wi-Fi password	This configuration requires entering the Wi-Fi password when Wi-Fi Custom is selected in the networking mode.	30

> 1.3.3. LTE Config

LTE APN	-
LTE APN User	_
LTE APN Password	_

Configuration Item	Explanation of Configuration Items	Maximum Length
LTE APN	You need to enter the name of the 4G network access point of the SIM card when selecting 4G connectivity mode.	
LTE APN User	APN username, not required if it is unavailable.	30
LTE APN Password	APN user password, not required if it is unavailable.	30

> 1.4. OCPP Central System Configuration

> 1.4.1. Security

SSL Enable

SSL Unable

Configuration Item	Explanation of Configuration Items
SSL Enable / Unable	This configuration means that, based on the server, you can choose whether to enable SSL encryption or not.

1. WEB configuration

> 1.4.2. Server

Central System Hostname	
Central System Port 0	
Charge Point Identity	
Charge Point Path	

Configuration Item	Explanation of Configuration Items	Maximum Length
Central System Hostname	Server domain name or IP address	50
Central System Port	If the URL does not specify a special port, the default port is 443 when SSL is enabled. Otherwise the default port is 80.	
Charge Point Identity	Charge point number	30
Charge Point Path	For example, in the URL, the URL is: ws:// <central system hostname>:<port>/ocpp/16J/<charge point<br="">identifier> The charge point path is ocpp/16J</charge></port></central 	50

> 1.4.3. HTTP Basic Authentication

☐ Enable ✓ Unable	
Authorization Username	
Authorization Password	

Configuration Item	Explanation of Configuration Items	Maximum Length
HTTP Basic Authentication Enable / Unable	Whether this option is turned on or not depends on whether the OCPP Cloud Platform service requires it. If it is required, you need to enter a different check name and password for each EV charger. If you enter it incorrectly, the EV charger will fail to connect to the server.	
Authorization Username	HTTP authentication username generally matches the charging station identity	50
Authorization Password	HTTP Authentication password	20

1. WEB configuration

> 1.4.4. Custom Vendor Info

Charge Point Model		
Charge Point Vendor		
*		

Configuration Item	Explanation of Configuration Items	Maximum Length
Charge Point Model	This configuration is that, customized EV charger model will be submitted to the server, when the EV charger is logged into the server.	50
Charge Point Vendor	This configuration is that, customized EV charger manufacturer name will be submitted to the server, when the EV charger is logged into the server.	20

Example 1: URL: ws://zjbeny.com: 8080/ocpp/CP001

Example 2: URL: wss://zjbeny.com: 443/ocpp/CP001



1. WEB configuration

> 1.5. DLB Configuration

The EV charger can be equipped with a DLB box to achieve dynamic load balancing or photovoltaic energy management functions. For specific functions, please refer to the "DLB Manual". The configuration items on this page can configure the DLB function of the EV charger.

> 1.5.1. General



Configuration Item	Explanation of Configuration Items
DLB Enable / Unable	It is the general switch for the DLB function. When "Unable" is selected, all the configuration items will not take effect
Extreme Mode Enable / Unable	When this mode is enabled, the EV charger will stop charging under certain conditions due to the DLB setting. If it is unabled, the EV charger will maintain a charging current ≥ 6A.

> 1.5.2. Normal DLB

Max Grid Current		
40		

Configuration Item	Explanation of Configuration Items
Max Grid Current	Normal DLB overload current setting with a setting range of 6-99A

> 1.5.3. Solar DLB

Full charge at night Enable

Full charge at night Unable

Only Solar Mode

Hybrid Mode

Full Speed Mode

Use the Settings above the DLB box

Max Grid Current In Hybrid Mode

0

1. WEB configuration

Configuration Item	Explanation of Configuration Items
Full charge at night Enable/Unable	When this mode switched on, the EV charger will automatically switch to "full charge mode" from 8pm to 6am.
Only Solar Mode	When Only Solar mode is selected, the electricity from PV will be possibly used to charge the EV charger.
Hybrid Mode	When the hybrid mode is selected, a certain amount of grid electricity is allowed to charge the electric vehicle.
Full Speed Mode	When full speed mode is selected, the EV charger will work at the maximum charging rate.
Use the Settings above the DLB box	This configuration is enabled, and the EV charger will charge the electric vehicle based on the mode set on the DLB box
Max Grid Current In Hybrid Mode	When selecting the hybrid mode, you can set how much grid electricity is allowed.

> 1.5.4. DLB on cloud

DLB DataTransfer Interval
0

Configuration Item	Explanation of Configuration Items
DLB Date Transfer Interval	It means that setting the time interval for the DLB to report logs during the charging time period. The minimum setting time is 10 seconds. A setting value of 0 will stop the process: the DLB data is reported to the server. (DLB data is custom data outside of the OCPP protocol. So it requires the OCPP server to support this custom function. Otherwise, enabling reporting will not work).

> 1.6. RFID Configuration

> 1.6.1. General

RFID is only used offline

RFID can be used at any time

Configuration Item	Explanation of Configuration Items
RFID is only used offline	When you enable this configuration, the online EV charger will disable the use of RFID to start charging. Only the function of local authentication is available when the network is abnormal and the EV charger is offline.
RFID can be used at any time	When this configuration is enabled, you can swipe the RFID card to charge at any time.

> 1.6.2. RFID Unique Config

✓ RFID Unique Enable ☐ RFID Unique Unable		
RFID UniqueID 220500007		

Configuration Item	Explanation of Configuration Items	Maximum Length
RFID Unique Enable/ RFID Unique Unable	Select offline swiping card mode in the network configuration page. After this mode has been activated, you can start charging in the permanently offline mode with the set card.	
RFID Unique ID:	Card Number Configuration	20

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> 1.6.3. Reader mode configuration



Configuration Item	Explanation of Configuration Items	Maximum Length
RFID UID ModelC	IC card manufacturer offers its own physical card numbers. If the card is the M1 card, BENY EV charger can recognize its physical card number.	
RFID Custom Mode	In custom mode, the EV charger will read the IC card number based on the encryption method configured by the user.	
RFID Manufacturer Mode	In the default reading card mode, the EV charger only recognizes IC cards configured by the BENY writing tool, and IC card offered by BENY will have their card numbers configured by BENY in this way.	
RFID Custom Block:	Card Number Storage Address	0-63
RFID Custom Password:	Card PIN must be 12 characters	0-9, a-f, A-F

> 1.7. Other Configuration

> 1.7.1. Parameter configuration

The maximum current of the 25	e one connector	
MeterValueSampleInterval		
ConnectionTimeOut		

120

Configuration Item	Explanation of Configuration Items
The maximum current of the one connector	This item sets the maximum allowable charging current for a single connector
Meter Value Sample Interval	Sets the interval for Meter report logs. The minimum setting time is 10 seconds.
ConnectionTime Out	Timeout setting for swiping the card when the connector is unplugged. When it is set to 0, swiping the card is forbidden in the condition that the connector is unplugged.

> 1.7.2. Ground Fault Detection



1. WEB configuration

> 1.7.3. External Meter Enable

Enable		
Unable		

Configuration Item	Explanation of Configuration Items
Use External Meter Enable/Unable	When this configuration item is enabled, the EV charger uses the data from the external meter as its own metering data. It should be noted that, the brand and type of used meter should be specified by the manufacturer. It is recommended that the user only changes this configuration item on the first installation. In addition, due to the same hardware interface the DLB and the external meter use, either external meter or DLB function can be enabled at the same time.

> 1.7.4. Dry Contact Enable



Configuration Item	Explanation of Configuration Items
Dry Contact Enable/ Dry Contact Unable	Dry Contact is an optocoupler isolated input interface. When this function is enabled, the EV charger will determine whether or not it is in the allowable charging period based on the status of this interface.

> 1.7.5. Authorization Cache

🗹 Enable		
Unable		

Configuration Item	Explanation of Configuration Items
Authorization Cache Enable/ Authorization Cache Unable	If this configuration is enabled, the card will have a cache record. Therefore, when the server is unexpectedly offline, the card can be swiped to start charging. (there is a term of validity). When the server is restored, the data will be automatically uploaded for deducting the charging consumption, etc.

> 1.8. Password Configuration

> 1.8.1. Change Password



Configuration Item	Explanation of Configuration Items
Old Password	When you want to change your password, you need to enter your old password.
New Password	Enter the old password, and then enter the new password to change it.

1. WEB configuration

When you forget the password, you can restore the password to the default by long pressing the reset button inside the EV charger.

To restore the charger to its default settings, you should press the reset button for 20S after pressing the emergency stop button.





1. WEB configuration

> 1.10. Exit Web Configuration Mode

After the setting is completed, click the "Exit Web Configuration Mode" button, and the EV charger will automatically connect to the server according to the set parameters.